5/9/4 010392687 **Image available** WPI Acc No: 1995-294000/199539 XRPX Acc No: N95-222480 Regulating process for load-dependent brake pressure system in agricultural vehicles - uses fixed desired ideal vehicle deceleration and recorded characteristic field for momentary load state of tractor to determine reference factor value in normal area and to fix overall braking pressure for tractor. Patent Assignee: MERCEDES-BENZ AG (DAIM); DAIMLERCHRYSLER AG (DAIM) Inventor: PRESSEL J; REINER M Number of Countries: 006 Number of Patents: 004 Patent Family: Patent No Kind Applicat No Kind Date Week Date DE 4429231 C1 19950831 DE 4429231 Α 19940818 199539 EP 697314 🗸 EP 95109970 A2 19960221 Α 19950627 EP 697314 19970312 EP 95109970 Α 19950627 Α3 199722 B1 20000315 EP 95109970 EP 697314 Α 19950627 200018 Priority Applications (No Type Date): DE 4429231 A 19940818 Cited Patents: DE 4007360; DE 4130848; DE 4136571; EP 370671; EP 374484; WO 9002675 Patent Details: Patent No Kind Lan Pq Main IPC Filing Notes

DE 4429231 C1 7 B60T-008/18 EP 697314 B1 G B60T-007/20 Designated States (Regional): FR GB IT NL SE EP 697314 A2 G 8 B60T-007/20 Designated States (Regional): FR GB IT NL SE

EP 697314 B60T-008/18 Abstract (Basic): DE 4429231 C

With regulating deviations in the vehicle deceleration first a reference factor is matched for adjusting the tractor overall braking pressure within a predetermined area band. Only on exceeding this band is a braking pressure of the trailer set initially according to the desired vehicle deceleration matched within a predetermined braking band until the desired vehicle deceleration is achieved and eg the relevant reference factor value again lies in the predetermined normal area band.

The matching of the braking pressure for the trailer is carried out adaptively in stages of about 0.05 bar to 0.2 bar until the reference factor (k) for the overall braking pressure of the vehicle belonging to this changed trailer vehicle braking pressure is again within the normal area band. Where the tractor is fitted with brake pressure sensors , at least for the axles of the tractor , brake characteristic values using wheel speed and brake pressure data are determined from braking processes with different inter-axle brake pressure distribution and an actual brake factor value is determined therefrom for each load state.

USE/ADVANTAGE- For agricultural vehicle combinations with towing vehicle and trailer. The brake pressure can be reliably set even where no sensor data is available from the trailer.

Title Terms: REGULATE; PROCESS; LOAD; DEPEND; BRAKE; PRESSURE; SYSTEM; AGRICULTURE; VEHICLE; FIX; IDEAL; VEHICLE; DECELERATE; RECORD; CHARACTERISTIC; FIELD; MOMENTARY; LOAD; STATE; TRACTOR; DETERMINE;

1), TE 1

REFERENCE; FACTOR; VALUE; NORMAL; AREA; FIX; OVERALL; BRAKE; PRESSURE; TRACTOR

Derwent Class: Q18; X22; X25

International Patent Class (Main): B60T-007/20; B60T-008/18

International Patent Class (Additional): B60T-008/00; B60T-008/26;

B60T-008/30; B60T-008/58; B60T-008/60; B60T-013/66

File Segment: EPI; EngPI

Manual Codes (EPI/S-X): X22-C01; X22-P09; X25-N01A

Derwent WPI (Dialog® File 351): (c) 2003 Thomson Derwent. All rights reserved.